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OBJECTIVES: The aim of this study was to assess the indirect costs associated with multiple sclerosis (MS) from the perspective of Social Insurance Institution (ZUS) in Poland. **METHODS:** The estimates were based on data from the Social Insurance Institution (ZUS) referring to year 2012 and focused on absenteeism due to the illness: costs of sick leave as well as the short-term disability due to rehabilitation benefit and the burden of permanent (or long term) disability due to disability pension in Poland. Cost analysis was performed based on the Human Capital Approach taking into account Gross Domestic Product (GDP) per capita equaled 41 398 PLN and Gross Value Added (GVA) per worker equaled 99 697 PLN. Costs were presented in polish zloty (PLN). **RESULTS:** Total indirect costs of multiple sclerosis associated with absenteeism in the year 2012 in Poland were 39 870 385 PLN calculated using GDP per capita and 96 018 323 PLN as a GVA per worker. The predominant component of absenteeism of MS was sick leave, which accounted for 69%. Long and short term disability costs constituted 21% and 9% of total indirect costs of multiple sclerosis associated with absenteeism, respectively. One sick leave of person with multiple sclerosis generated the cost of lost productivity equal 1 866 PLN and 4 490 PLN calculated using GDP per capita and GVA per worker, respectively. Indirect cost of short-term disability for one entitlement to the benefit of rehabilitation were 17 077 PLN and 41 125 PLN, respectively. Cost of one long term benefit were much higher than short term benefit and equaled 41 398 PLN and 99 697 PLN, respectively. **CONCLUSIONS:** Multiple sclerosis in Poland generated very high indirect costs. The main component was sick leave; disability pension and rehabilitation benefit generated lower costs of lost productivity.

PSY44

COSTS OF ABSENTEEISM IN ANKYLOSING SPONDYLITIS BASED ON REAL-LIFE DATA FROM POLAND'S SOCIAL INSURANCE INSTITUTION DATABASE IN 2012

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OBJECTIVES: The aim of this study was to assess the indirect costs caused by absenteeism associated with ankylosing spondylitis (AS) from the perspective of the Social Insurance Institution (ZUS) in Poland. **METHODS:** The estimates were based on data provided by ZUS referring to year 2012 and concerning absence from work due to the illness (sick leave), the amount of short term disability, the sufferers of which claim rehabilitation benefit, and the amount of permanent (or long term) disability, the sufferers of which claim disability pension. Costs were calculated with Human Capital Approach methodology taking into account Gross Domestic Product (GDP) per capita equaled 41 398PLN and Gross Value Added (GVA) per worker equaled 99 697PLN and were presented in 2012 prices in Polish zloty (PLN). **RESULTS:** Total indirect costs of AS in the year 2012 calculated using GDP per capita and GVA per worker in Poland were 21 299 578PLN and 51 294 959PLN, respectively. The highest component of indirect costs of AS was sick leave (56%). Long and short term disability costs constitute 6% and 39% of total indirect costs of AS, respectively. In 2012 Poland's Social Insurance Institution database reported 3 500 patients on sick leave, 72 patients with short term disability and 7 patients with long term disability. Indirect costs per patient associated with sick leave were 3 400PLN and 8 188PLN calculated using GDP per capita and GVA per worker, respectively. Indirect costs per patient associated with short term disability were 16 602PLN and 39 983PLN respectively and associated with long term disability were as high as 1 171 958PLN and 2 822 381PLN, respectively. **CONCLUSIONS:** AS in Poland generated high indirect costs. The main component was sick leave; rehabilitation benefit and disability pension generated lower costs of lost productivity.

PSY45

THE ECONOMIC BURDEN OF SYSTEMIC LUPUS ERYTHEMATOSUS: A STRUCTURED LITERATURE REVIEW

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OBJECTIVES: To assess the direct and indirect costs of systemic lupus erythematosus (SLE), analysis of which is complex due to the heterogeneity of the disease, accumulative organ damage and associated comorbidities. **METHODS:** Direct and indirect costs attributable to SLE were extracted from studies published January 2004–March 2013, identified using Medline, EMBASE, EconLit and NHS EED. Eligible studies involved adults with active SLE. **RESULTS:** The direct cost associated with SLE management was €3,691/yr in Europe.[1] In the US, annual health care costs were $10,984 higher for SLE patients vs non-SLE controls.[2] Organ damage and disease activity were key drivers of annual cost variations;[1–4] in Europe, cardiovascular/respiratory (€596/yr) and renal involvement (€511/yr) appeared the most costly organs.[1] Estimated direct annual cost of treating any flare in the EU was ~€399, whilst for severe flares was ~€1,002.[1] In the US, renal involvement was the most costly organ: cost ratios were 3.1 (95% CI: 2.3–4.2) in newly diagnosed and 2.7 (95% CI: 2.4–3.0) in existing SLE patients.[4] Annual costs for mild and severe flares in the US were $129/flare and $11,716/flare, respectively.[2] The indirect economic burden is also substantial, as SLE typically occurs during the peak of working years and in young women with child-bearing potential (around the age of 20 in Black females and 30 in White females).[5,6] Predictors of future work loss in SLE included older age, shorter job tenure, thrombotic and musculoskeletal manifestations, greater number of manifestations and high disease.[7,8] **CONCLUSIONS:** The direct and indirect economic burden is prominent within SLE patients. Organ damage is a substantial "hidden cost" and should be considered when assessing the economic impact

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PSY46

THE COST OF ACTIVE SYSTEMIC LUPUS ERYTHEMATOSUS IN GREECE RESULTS FROM THE LYCOS STUDY

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OBJECTIVES: Systemic Lupus Erythematosus (SLE) is an autoimmune disease, characterized by periods of remissions and flares, with significant clinical and economic burden. The primary study objective was to estimate the 1-year direct medical cost for adult patients with active, autoantibody-positive SLE in Greece. **METHODS:** This is a national, multi-centre, retrospective study. Data were abstracted from patient records in 6 hospital centers specialized in SLE management. Starting with the patient with the most recent visit, patients with consecutive visits (backwards in time) were considered for inclusion, provided they met specific criteria. In order to estimate costs per disease severity, a stratification criterion was applied. Patient data were collected for a 1-year period starting from the inclusion date (January -September 2011) and moving forward. Data included patient characteristics and health care resource utilization. In addition, all SLE patients fulfilling the inclusion criteria and followed-up in the participating centers during a 3-month retrospective period were recorded. For cost calculation, official 2013 list prices were used. **RESULTS:** 215 patients (30% severe according to the stratification criterion) were included in the study. Mean direct medical costs were estimated at €1,225 for patients with non-severe and at €3,741 for patients with severe active SLE. Laboratory and imaging tests, medicines, physicians' visits, and hospitalization costs represented 10.5%, 51.7%, 1.2%, 36.5% of mean cost respectively. Costs were statistically significantly higher for severe SLE patients. The total number of patients visiting the participating clinical sites during a 3-month period was 318 (19% with severe SLE). The weighted mean annual direct medical cost of SLE in Greece was estimated at €1,703. **CONCLUSIONS:** Direct medical cost of SLE in Greece is significant, especially for patients with severe disease. An estimation of indirect costs would provide a comprehensive picture of the societal burden of the disease.

PSY47

ROMIPLOSTIM COST PER RESPONSE IN ITP TREATMENT IN THE BRAZILIAN HEALTH CARE SYSTEM

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OBJECTIVES: Immune thrombocytopenia (ITP) is characterized by isolated thrombocytopenia with no underlying cause. It manifests clinically as mucocutaneous bleeding caused by decreased platelets. Recently, two thrombopoietin receptor-agonists have emerged as an important therapeutic options: romiplostim and eltrombopag. Since these medications have different mode of administration, safety and efficacy profiles, the present study was carried out in an attempt to investigate which drug would be more cost-effective in the Brazilian setting. The objective was to perform an economic analysis evaluating the cost per response of romiplostim versus eltrombopag in adult patients with chronic ITP and refractory to other treatments as corticosteroids and immunoglobulins in Brazil health care private system. **METHODS:** Two economic analyses were performed in order to study the use of romiplostim and eltrombopag for the treatment of adults with chronic refractory ITP, based on annual treatment costs and cost per response. The average body weight adopted was 74,6 kg. Efficacy data were obtained from the product inserts, as well as from scientific publications. In cost per response, it was considered a 6-month analysis, which corresponds to the overall platelet response in clinical trials. The outcome of these trials was the global response to treatment. The cost of each drug presentation were based on ex-factory price (VAT 18%) and obtained from the official price list (CMED; April, 2014). **RESULTS:** The cost of treatment with romiplostim showed an annual saving of R$7,724 over eltrombopag within the payer perspective, which may be further improved if we assume that drug-food interactions of eltrombopag in some patients lead to reduced medication adherence and loss of response. The cost per response with romiplostim was 26% lower than with eltrombopag. **CONCLUSIONS:** Romiplostim was more cost-effective than eltrombopag for the treatment of chronic refractory ITP in adult patients and may represent savings to the Brazilian health system.

PSY48

DIRECT AND INDIRECT COSTS ASSOCIATED WITH INCREASING BODY MASS INDEX (BMI) IN THE EU5

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OBJECTIVES: This study evaluated the impact of BMI category on health utilities, health care resource-utilisation, productivity, activity impairment, and associated costs. **METHODS:** Results were from the 2013 EU5 National Health and Wellness Survey (N=62,000), a nationally representative, online survey of respondents aged ≥ 18 years. This analysis focused on normal weight (BMI≥18.5 & <25 kg/m2), overweight (BMI≥25 & <30 kg/m2), obese class (OC) I (BMI≥30 & <35 kg/m2), OC II (BMI≥35 & <40 kg/m2), and OC III (BMI≥40 kg/m2) respondents. Patients provided information on SF-6D (health utility) scores, productivity loss (Work Productivity and Activity Impairment questionnaire) and resource-utilisation (type/number of visits) in the past six months. Direct and indirect costs were estimated from the literature. Generalised linear models predicted resource use and productivity as a function of BMI category, adjusting for covariates (e. g., age, gender, comorbidities). **RESULTS:** Among 58,364 respondents, 46.9% were normal weight, 34.5% were overweight, 12.5% were OC I, 4.0% were OC II, and 2.1% were OC III. Metabolic comorbidities increased as BMI increased. Adjusting for covariates, health utility (normal weight: 0.720; overweight: 0.718; OC I: 0.703; OC II: 0.683; OC III: 0.662) scores declined with an increase in BMI (all $p<0.05$ vs. normal). Among employed patients (57.7%), overall work impairment increased as BMI increased (normal weight: 17.9%; overweight: 18.4%; OC I: 19.0%; OC II: 21.4%; OC III: 26.7%, $p<0.05$ all OCs vs. normal). Normal